SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

| Version | Revision Date: | MSDS Number: | Date of last issue: 18.08.2015 |
|---|---|---|---|
| 1.1 | 18.08.2015 | | Date of first issue: 11.08.2015 |

## SECTION 1 : Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Trade name :

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- stance/Mixture : Raw material

### 1.3 Details of the supplier of the safety data sheet

**Manufacturer** :

Address :

Telephone :

E-mail address of person responsible for the SDS :

**Importer** :

Address :

Telephone :

### 1.4 Emergency telephone number

## SECTION 2 : Hazards identification

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

| | |
|---|---|
| Flammable liquids, Category 3 | H226 : Flammable liquid and vapour. |
| Skin irritation, Category 2 | H315 : Causes skin irritation. |
| Eye irritation, Category 2 | H319 : Causes serious eye irritation. |
| Specific target organ toxicity – single exposure, Category 3 | H335 : May cause respiratory irritation. |
| Specific target organ toxicity - repeated exposure, Category 2 | H373 : May cause damage to organs through prolonged or repeated exposure. |
| Chronic aquatic toxicity, Category 3 | H412 : Harmful to aquatic life with long lasting effects. |

**Classification (67/548/EEC, 1999/45/EC)**

| | | |
|---|---|---|
| Flammable | R10 | : Flammable. |
| Harmful | R20/21 | : Harmful by inhalation and in contact with skin. |

R48/20/21/22 : Harmful : danger of serious damage to health by prolonged through inhalation, in contact with skin and if swallowed.

Irritant R36/37/38 : Irritating to eyes, respiratory system and skin.

**2.2 Label elements**

**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :

Signal word : Warning

Hazard statements :
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention :**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eyeprotection/ face protection.

**Response :**
P304 + P340 + P312 IF INHALED : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P314 Get medical advice/ attention if you feel unwell.
P337 + P313 If eye irritation persists : Get medical advice/attention.

Hazardous components which must be listed on the label :

**2.3 Other hazards**

Vapours may form explosive mixture with air.

## SECTION 3 : Composition/information on ingredients

**3.2 Mixtures**

**Hazardous components**

| Chemical Name | CAS-No.<br>EC-No.<br>Registration number | Classification (67/548/EEC) | Classification (REGULATION (EC) No 1272/2008) | Concentration (%) |
|---|---|---|---|---|
| | | R10<br>Xn; R65-R20/21-R48/20/21/22<br>Xi; R36/37/38 | Flam. Liq.3; H226<br>Acute Tox.4; H332<br>Acute Tox.4; H312<br>Skin Irrit.2; H315<br>Eye Irrit.2; H319<br>STOT SE3; H335<br>STOT RE2; H373<br>Asp. Tox.1; H304 | > 0 |
| | ; | F; R11<br>Xn;R20-R65-R48/20 | Flam. Liq.2; H225<br>Acute Tox.4; H332<br>STOT RE2; H373<br>Asp. Tox.1; H304<br>Aquatic Chronic3; H412 | |

For explanation of abbreviations see section 16.

## SECTION 4 : First aid measures

### 4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.

In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Get medical attention. Wash clothing before reuse.
Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens, if worn. Get medical attention.

If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.

### 4.2 Most important symptoms and effects, both acute and delayed

Risks : May produce an allergic reaction.

Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.

**4.3 Indication of any immediate medical attention and special treatment needed**

Treatment : Treat symptomatically and supportively.

## SECTION 5 : Firefighting measures

**5.1 Extinguishing media**

Suitable extinguishing media : Water spray
Alcohol-resistant foam
Dry chemical
Carbon dioxide (CO2)

Unsuitable extinguishing media : High volume water jet

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire.
Flash back possible over considerable distance.
Vapours may form explosive mixtures with air.
Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides
Silicon oxides

**5.3 Advice for firefighters**

Special protective equipment s for firefighter : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

## SECTION 6 : Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Remove all sources of ignition.
Use personal protective equipment.
Follow safe handling advice and personal protective equipment recommendations.

**6.2 Environmental precautions**

Environmental precautions : Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).

Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

**6.3 Methods and material for containment and cleaning up**

Methods for cleaning up : Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapours/mists with a water spray jet.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can bepumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

**6.4 Reference to other sections**

See sections : 7, 8, 11, 12 and 13.

## SECTION 7 : Handling and storage

**7.1 Precautions for safe handling**

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.
Use only in an area equipped with explosion proof exhaust ventilation.

Advice on safe handling : Do not get on skin or clothing.
Do not breathe vapours or spray mist. Do not swallow.
Do not get in eyes.
Handle in accordance with good industrial hygiene and safety practice.
Non-sparking tools should be used. Keep container tightly closed.
Keep away from heat and sources of ignition.
Take precautionary measures against static discharges.
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Keep in properly labelled containers. Store locked up. Keep tightly closed. Keep in a cool, Il-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition.

Advice on common storage : Do not store with the following product types :
Strong oxidizing agents
Organic peroxides
Flammable solids
Pyrophoric liquids
Pyrophoric solids
Self-heating substances and mixtures
Substances and mixtures, which in contact with water, emit flammable Gases
Explosives Gases

**7.3 Specific end use(s)**

Specific use(s) : No data available

**SECTION 8 : Exposure controls/personal protection**

**8.1 Control parameters**

**Occupational Exposure Limits**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|---|---|---|---|---|
| | | TWA | 50 ppm<br>220 mg/m³ | GB EH40 |
| Further information | Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity. | | | |
| | | STEL | 100 ppm<br>441 mg/m³ | 2000/39/EC |
| Further information | Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity. | | | |
| | | TWA | 50 ppm<br>221mg/m³ | 2000/39/EC |
| Further information | Identifies the possibility of significant uptake through the skin, Indicative | | | |
| | | STEL | 100 ppm<br>442 mg/m³ | 2000/39/EC |
| Further information | Identifies the possibility of significant uptake through the skin, Indicative | | | |
| | | TWA | 100 ppm<br>442 mg/m³ | 2000/39/EC |
| Further information | Identifies the possibility of significant uptake through the skin, Indicative | | | |
| | | STEL | 200 ppm<br>884 mg/m³ | 2000/39/EC |

| | | | | |
|---|---|---|---|---|
| Further information | Identifies the possibility of significant uptake through the skin, Indicative | | | |
| | | TWA | 100 ppm<br>441 mg/m³ | GB EH40 |
| Further information | Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity. | | | |
| | | STEL | 125 ppm<br>552 mg/m³ | GB EH40 |
| Further information | Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity. | | | |

**Biological occupational exposure limits**

| Substance name | CAS-No. | Control parameters | Sampling time | Basis |
|---|---|---|---|---|
| | | 0 | F | GB EH40<br>BAT |

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006 :**

: End Use : Workers
Exposure routes : Inhalation
Potential health effects : Acute systemic effects
Value : 289 mg/m3
End Use : Workers
Exposure routes : Inhalation
Potential health effects : Acute local effects
Value : 289 mg/m3
End Use : Workers
Exposure routes : Skin contact
Potential health effects : Long-term systemic effects
Value : 180 mg/kg bw/day
End Use : Workers
Exposure routes : Inhalation
Potential health effects : Long-term systemic effects
Value : 77 mg/m3
End Use : Consumers
Exposure routes : Inhalation
Potential health effects : Acute systemic effects
Value : 174 mg/m3
End Use : Consumers
Exposure routes : Inhalation
Potential health effects : Acute local effects
Value : 174 mg/m3
End Use : Consumers
Exposure routes : Skin contact
Potential health effects : Long-term systemic effects
Value : 108 mg/kg bw/day

End Use : Consumers
Exposure routes : Inhalation
Potential health effects : Long-term systemic effects
Value : 14.8 mg/m3
End Use : Consumers
Exposure routes : Ingestion
Potential health effects : Long-term systemic effects
Value : 1.6 mg/kg bw/day
: End Use : Workers
Exposure routes : Inhalation
Potential health effects : Acute local effects
Value : 293 mg/m3
End Use : Workers
Exposure routes : Skin contact
Potential health effects : Long-term systemic effects
Value : 180 mg/kg bw/day
End Use : Workers
Exposure routes : Inhalation
Potential health effects : Long-term systemic effects
Value : 77 mg/m3
End Use : Consumers
Exposure routes : Inhalation
Potential health effects : Long-term systemic effects
Value : 15 mg/m3
End Use : Consumers
Exposure routes : Ingestion
Potential health effects : Long-term systemic effects
Value : 1.6 mg/kg bw/day

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006 :**

: Fresh water
Value : 0.327 mg/l
Marine water
Value : 0.327 mg/l
Intermittent use/release
Value : 0.327 mg/l
Sewage treatment plant
Value : 6.58 mg/l
Fresh water sediment
Value : 12.46 mg/kg
Marine sediment
Value : 12.46 mg/kg
Soil
Value : 2.31 mg/kg
: Fresh water
Value : 0.1 mg/l
Marine water

Value : 0.01 mg/l
Intermittent use/release
Value : 0.1 mg/l
Sewage treatment plant
Value : 9.6 mg/l
Fresh water sediment
Value : 13.7 mg/kg
Soil
Value : 2.68 mg/kg
Oral
Value : 0.02 g/kg

**8.2 Exposure controls**

**Engineering measures**

Minimize workplace exposure concentrations.
Use only in an area equipped with explosion proof exhaust ventilation. Use with local exhaust ventilation.

**Personal protective equipment**

Eye protection : Wear the following personal protective equipment :
Safety goggles

Hand protection

Material : Impervious gloves
Flame retardant gloves

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work.
Breakthrough time is not determined for the product.
Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Wear the following personal protective equipment :
Flame retardant antistatic protective clothing.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Organic vapour type (A)

## SECTION 9 : Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

| | | |
|---|---|---|
| Appearance | : | liquid |
| Colour | : | |
| Odour | : | solvent-like |
| Odour Threshold | : | No data available |
| pH | : | No data available |
| Melting point/freezing point | : | No data available |
| Initial boiling point and boiling range | : | No data available |
| Flash point | : | Method : closed cup |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | Not applicable |
| Upper explosion limit | : | No data available |
| Lower explosion limit | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density | : | No data available |
| Density | : | m3 (25 °C) |
| Solubility(ies) | | |
| Water solubility | : | No data available |
| Partition coefficient : n-octanol/water | : | Not applicable |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | mPa.s (25 °C) |
| Explosive properties | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |

**9.2 Other information**

No data available

## SECTION 10 : Stability and reactivity

**10.1 Reactivity**

Not classified as a reactivity hazard.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : Flammable liquid and vapour.
Vapours may form explosive mixture with air.
Can react with strong oxidizing agents.

**10.4 Conditions to avoid**

Conditions to avoid : Heat, flames and sparks.

**10.5 Incompatible materials**

Materials to avoid : Oxidizing agents

**10.6 Hazardous decomposition products**

No hazardous decomposition products are known.

## SECTION 11 : Toxicological information

**11.1 Information on toxicological effects**

Information on likely routes of exposure : Inhalation
Skin contact
Ingestion
Eye contact

**Acute toxicity**

Not classified based on available information.

**Product :**

Acute inhalation toxicity : Acute toxicity estimate : > 20 mg/l
Exposure time : 4 h
Test atmosphere : vapour
Method : Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 2,000 mg/kg
Method : Calculation method

**Components :**

Acute oral toxicity : LD50 (Rat) : 4,300 mg/kg
Method : Directive 67/548/EEC, Annex V, B.1.

Acute inhalation toxicity : Acute toxicity estimate : 11 mg/l
Test atmosphere : vapour
Method : Expert judgement
Remarks : Based on harmonised classification in EU regulation 1272/2008, Annex VI

Acute dermal toxicity : Acute toxicity estimate : 1,100 mg/kg
Method : Expert judgement
Remarks : Based on harmonised classification in EU regulation 1272/2008, Annex VI

Acute oral toxicity : LD50 (Rat) : 3,500 mg/kg

Acute inhalation toxicity : LC50 (Rat) : 17.2 mg/l
Exposure time : 4 h

Test atmosphere : vapour

Acute dermal toxicity : LD50 (Rabbit) : > 5,000 mg/kg

**Skin corrosion/irritation**
Causes skin irritation.
**Components :**

Species : Rabbit
Result : Skin irritation

**Serious eye damage/eye irritation**
Causes serious eye irritation.
**Components :**

Species : Rabbit
Result : Irritation to eyes, reversing within 7 days
**Ethylbenzene :**
Species : Rabbit
Result : No eye irritation

**Respiratory or skin sensitisation**
Skin sensitisation : Not classified based on available information.
Respiratory sensitisation : Not classified based on available information.
**Components :**

Test Type : Local lymph node assay (LLNA)
Exposure routes : Skin contact
Species : Mouse
Method : OECD Test Guideline 429
Result : negative
**Ethylbenzene :**
Test Type : Human repeat insult patch test (HRIPT)
Exposure routes : Skin contact
Result : negative

**Germ cell mutagenicity**
Not classified based on available information.
**Components :**

Genotoxicity in vitro : Test Type : Chromosome aberration test in vitro
Result : negative

: Test Type : In vitro sister chromatid exchange assay in mammalian cells
Result : negative

Genotoxicity in vivo : Test Type : Rodent dominant lethal test (germ cell) (in vivo)

Species : Mouse
Application Route : Skin contact
Result : negative

Genotoxicity in vitro : Test Type : Chromosome aberration test in vitro
Result : negative
: Test Type : In vitro mammalian cell gene mutation test
Method : OECD Test Guideline 476
Result : negative

Genotoxicity in vivo : Test Type : Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo
Species : Mouse
Application Route : Inhalation
Method : OECD Test Guideline 486
Result : negative

**Carcinogenicity**
Not classified based on available information.
**Components :**

Species : Rat
Application Route : Ingestion
Exposure time : 103 weeks
Result : negative
**Ethylbenzene** :
Species : Rat
Application Route : Inhalation
Exposure time : 104 weeks
Result : positive
Remarks : The mechanism or mode of action may not be relevant in humans.

**Reproductive toxicity**
Not classified based on available information.
**Components :**

Effects on fertility : Test Type : One-generation reproduction toxicity study
Species : Rat
Application Route : inhalation (vapour)
Result : negative

Effects on foetal development : Test Type : Embryo-foetal development
Species : Rat
Application Route : inhalation (vapour)
Result : negative

**Ethylbenzene** :
Effects on fertility : Test Type : Two-generation reproduction toxicity study

Species : Rat
Application Route : inhalation (vapour)
Method : OECD Test Guideline 415
Result : negative

Effects on foetal development : Test Type : Embryo-foetal development
Species : Rat
Application Route : Inhalation
Method : OECD Test Guideline 414
Result : negative

**STOT - single exposure**
May cause respiratory irritation.
**Components :**
Assessment : May cause respiratory irritation.

**STOT - repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
**Components :**

Exposure routes : inhalation (vapour)
Target Organs : Central nervous system, Liver, Kidney
Assessment : Shown to produce significant health effects in animals at concentrations of >0.2 to 1 mg/l/6h/d.
**Ethylbenzene :**
Exposure routes : inhalation (vapour)
Target Organs : Auditory system
Assessment : Shown to produce significant health effects in animals at concentrations of >0.2 to 1 mg/l/6h/d.

**Repeated dose toxicity**
**Components :**

Species : Rat NOAEL : 4.35 mg/l
Application Route : inhalation (vapour)
Exposure time : 90 d
**Ethylbenzene :** Species : Rat, female
LOAEL : 75 ppm
Application Route : inhalation (vapour)
Exposure time : 104 w

**Aspiration toxicity**
Not classified based on available information.
**Components :**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Ethylbenzene** :
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

## SECTION 12 : Ecological information

### 12.1 Toxicity

**Components :**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)) : 13.5 mg/l<br>Exposure time : 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)) : 3.2 mg/l<br>Exposure time : 48 h<br>Remarks : Based on data from similar materials |
| Toxicity to algae | : | EC50 (Selenastrum capricornutum (green algae)) : 3.2 mg/l<br>Exposure time : 72 h<br>Remarks : Based on data from similar materials |
| Toxicity to bacteria | : | EC50 : > 157 mg/l<br>Exposure time : 3 h<br>Method : OECD Test Guideline 209<br>Remarks : Based on data from similar materials |
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)) : 4.2 mg/l<br>Exposure time : 96 h<br>Method : OECD Test Guideline 203 |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)) : 1.8 - 2.4 mg/l<br>Exposure time : 48 h |
| Toxicity to algae | : | EC50 (Pseudokirchneriella subcapitata (green algae)) : 5.4mg/l<br>Exposure time : 72 h |
| Toxicity to bacteria | : | EC50 (Nitrosomonas sp.) : 96 mg/l<br>Exposure time : 24 h<br>Method : OECD Test Guideline 209 |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC : 0.96 mg/l<br>Exposure time : 7 d<br>Species : Ceriodaphnia dubia (water flea) |

### 12.2 Persistence and degradability

**Components :**

| | | |
|---|---|---|
| Biodegradability | : | Result : Readily biodegradable Biodegradation : 87.8 %<br>Exposure time : 28 d |

Method : OECD Test Guideline 301F
Remarks : Based on data from similar materials

**Ethylbenzene :**
Biodegradability : Result : Readily biodegradable Biodegradation : 70 - 80 %
Exposure time : 28 d

**12.3 Bioaccumulative potential**

**Components :**
:

Bioaccumulation : Species : Oncorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF) : 5.4 - 25.9

Partition coefficient : n- octanol/water : log Pow : 3.12 - 3.2

**Ethylbenzene :**
Bioaccumulation : Species : Fish
Bioconcentration factor (BCF) : < 100
Remarks : Based on data from similar materials

Partition coefficient : n- octanol/water : log Pow : 3.6

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
Not relevant

**12.6 Other adverse effects**
No data available

## SECTION 13 : Disposal considerations

**13.1 Waste treatment methods**

Product : Dispose of in accordance with local regulations.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not burn, or use a cutting torch on, the empty drum.

## SECTION 14 : Transport information

**14.1 UN number**

ADN : UN

ADR : UN
RID : UN
IMDG : UN
IATA : UN

**14.2 UN proper shipping name**

ADN : RESIN SOLUTION
ADR : RESIN SOLUTION
RID : RESIN SOLUTION
IMDG : RESIN SOLUTION
IATA : Resin solution

**14.3 Transport hazard class(es)**

ADN : 3
ADR : 3
RID : 3
IMDG : 3
IATA : 3

**14.4 Packing group**

**ADN**
Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

**ADR**
Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3
Tunnel restriction code : (D/E)

**RID**
Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

**IMDG**
Packing group : III
Labels : 3
EmS Code : F-E, S-E

**IATA**
Packing instruction (cargo aircraft) : 366
Packing instruction (passenger aircraft) : 355
Packing instruction (LQ) : Y344
Packing group : III

Labels : Flammable Liquids

**14.5 Environmental hazards**

**ADN**

Environmentally hazardous : no

**ADR**

Environmentally hazardous : no

**RID**

Environmentally hazardous : no

**IMDG**

Marine pollutant : no

**14.6 Special precautions for user**

Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Remarks : Not applicable for product as supplied.

**SECTION 15 : Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic Pollutants : Not applicable

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of majoraccident hazards involving dangerous substances

| | | Quantity 1 | Quantity 2 |
|---|---|---|---|
| 6 | Flammable. | 5,000 t | 50,000 t |

Seveso III : Directive 2012/18/EU of the European Parliament and of the Council on the control of majoraccident hazards involving dangerous substances.

| | | | |
|---|---|---|---|
| | FLAMMABLE LIQUIDS | 5,000 t | 50,000 t |

Other regulations : Take note of Dir 94/33/EC on the protection of young people at work.

**15.2 Chemical Safety Assessment**

A Chemical Safety Assessment has not been carried out.

**SECTION 16 : Other information**

Full text of R-Phrases

| | | |
|---|---|---|
| R10 | : | Flammable. |
| R11 | : | Highly flammable. |
| R20 | : | Harmful by inhalation. |
| R20/21 | : | Harmful by inhalation and in contact with skin. |
| R36/37/38 | : | Irritating to eyes, respiratory system and skin. |
| R48/20 | : | Harmful : danger of serious damage to health by prolonged exposure through inhalation. |
| R48/20/21/22 | : | Harmful : danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. |
| R65 | : | Harmful : may cause lung damage if swallowed. |

**Full text of H-Statements**

| | | |
|---|---|---|
| H225 | : | Highly flammable liquid and vapour. |
| H226 | : | Flammable liquid and vapour. |
| H304 | : | May be fatal if swallowed and enters airways. |
| H312 | : | Harmful in contact with skin. |
| H315 | : | Causes skin irritation. |
| H319 | : | Causes serious eye irritation. |
| H332 | : | Harmful if inhaled. |
| H335 | : | May cause respiratory irritation. |
| H373 | : | May cause damage to organs through prolonged or repeated exposure. |
| H412 | : | Harmful to aquatic life with long lasting effects. |

**Full text of other abbreviations**

| | | |
|---|---|---|
| Acute Tox. | : | Acute toxicity |
| Aquatic Chronic | : | Chronic aquatic toxicity |
| Asp. Tox. | : | Aspiration hazard |
| Eye Irrit. | : | Eye irritation |
| Flam. Liq. | : | Flammable liquids |
| Skin Irrit. | : | Skin irritation |
| Skin Sens. | : | Skin sensitisation |
| STOT RE | : | Specific target organ toxicity - repeated exposure |
| STOT SE | : | Specific target organ toxicity - single exposure |
| 2000/39/EC | : | Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values |
| GB EH40 | : | UK. EH40 WEL - Workplace Exposure Limits |
| GB EH40 BAT | : | UK. Biological monitoring guidance values |
| 2000/39/EC / TWA | : | Limit Value - eight hours |
| 2000/39/EC / STEL | : | Short term exposure limit |
| GB EH40 / TWA | : | Long-term exposure limit (8-hour TWA reference period) |
| GB EH40 / STEL | : | Short-term exposure limit (15-minute reference period) |

**Further information**

| | | |
|---|---|---|
| Sources of key data used to compile the Safety Data Sheet | : | Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http : //echa.europa.eu/ |

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

GB / EN